

Health Care Delivery

Postmenopausal Estrogens—Current Prescribing Patterns of San Diego Gynecologists

ELIZABETH BARRETT-CONNOR, MD, La Jolla, California

San Diego gynecologists were surveyed to determine 1985 prescribing patterns and indications for postmenopausal estrogens. More than 75% of the 103 respondents indicated that they prescribed estrogen for at least 75% of their recently postmenopausal patients, usually for a prolonged period. The dose and duration of estrogen were those recommended to prevent osteoporosis, which was given by all but one physician as a major indication for estrogen use. Only five gynecologists prescribed estrogen without a progestin, which was added primarily to reduce the risk of estrogen-associated endometrial cancer. These data suggest that San Diego gynecologists are well informed about the risks and benefits of estrogen-replacement therapy and are less concerned about the paucity of data concerning long-term progestin use in older women.

(Barrett-Connor E: Postmenopausal estrogens—Current prescribing patterns of San Diego gynecologists. West J Med 1986 May; 144:620-621)

In the United States, estrogen-replacement therapy for postmenopausal women became popular in the 1960s and prescription sales of noncontraceptive estrogens, primarily conjugated equine estrogen, rose steadily.¹ By the mid-1970s, estrogen use was particularly common on the West Coast, where 39% and 51% of postmenopausal women in two populations reported current use.^{2,3} Estrogen sales declined after 1975 following the recognition that users were at an increased risk of endometrial cancer.¹ Since 1980, however, recognition of the apparent protective effect of an added progestin against estrogen-associated endometrial cancer⁴ and of the role of estrogen-replacement therapy in preventing osteoporosis⁵ led to renewed enthusiasm for this therapy.

This survey was designed to determine the effect of these developments on gynecologists' prescribing patterns for replacement estrogens in 1985.

Methods

An 11-item questionnaire and a stamped return envelope were mailed to all 166 physicians listed under gynecology in the yellow pages of the 1985 San Diego telephone directory. All questions were posed in relation to recently postmenopausal women aged 50+ years with an intact uterus. Physicians were asked about the number of women in this category whom they saw monthly, duration of practice, proportion of recently postmenopausal patients for whom they had prescribed estrogens, dose and duration of estrogen usually pre-

scribed, use and indication for an estrogen-progestin combination and the main indications and contraindications for prescribing unopposed estrogen. Mailed anonymous responses were tabulated approximately three months after the mailing.

Results

The response rate was 65% (N = 108), including five physicians no longer in practice. Results are based on the 103 respondents who were in practice at the time of the survey, of whom 83 (81%) had been in practice for at least ten years. Unless otherwise indicated in the text, responses were similar by duration of practice. In all, 19% of physicians saw fewer than 10 and 28% saw more than 40 recently postmenopausal women aged 50+ in their offices each month; their prescribing patterns did not differ from those of the majority (52%) who saw between 10 and 40 such patients each month.

Among the 83 gynecologists in practice in 1975, 52 (63%) said that the frequency of their prescribing of estrogen replacement had increased since that time. As of 1985, only three physicians, all in practice more than ten years, indicated that they rarely prescribed replacement estrogens. A striking majority (79% of those beginning practice after 1975 and 83% of those in practice longer) prescribed replacement estrogens for at least 75% of their recently postmenopausal patients, and 58% of all respondents said they prescribed an estrogen for virtually all such patients. None of these physi-

From the Department of Community and Family Medicine and Medicine, University of California, San Diego, School of Medicine, La Jolla.

Reprint requests to Elizabeth Barrett-Connor, MD, Department of Community and Family Medicine and Medicine (M-007), University of California, San Diego, La Jolla, CA 92093.

cians prescribed estrogen for less than one year and 73% said that they usually recommended estrogen replacement therapy for ten or more years after the menopause. Conjugated estrogens (Premarin) were by far the most commonly prescribed drug, used exclusively or at least part of the time by 87 physicians, usually (71 physicians) in a daily dose of 0.625 mg. Estradiol (Estrace), 1 to 2 mg, or estropipate (Ogen), 1.25 to 2.5 mg, were used less frequently and only three physicians regularly prescribed vaginal estrogens. Drug preferences and dosages did not vary by duration of practice.

None of the gynecologists in practice less than ten years and only five of those in practice longer prescribed an estrogen taken orally without a progestin: 91 physicians said that they added a progestin to prevent endometrial cancer; 50% gave this as the only reason for adding a progestin. Of interest, 13 of the long-term and one of the short-term gynecologists stated that they had done at least one hysterectomy specifically to permit the use of unopposed estrogen without concern for endometrial cancer.

Among the major indications for estrogen-replacement therapy, preventing osteoporosis was cited by all but one respondent. Among the physicians who ranked the reasons for estrogen use, preventing osteoporosis was ranked as the leading indication by 9 of 16 (56%) recent and 27 of 68 (40%) long-term physicians and was ranked second (to menopausal symptoms) in all of the remainder. Among absolute contraindications to unopposed estrogen (other than the risk of endometrial cancer), current or prior cancer was mentioned by 60%.

Discussion

If these respondents are representative of gynecologic practice in San Diego, then 75% of recently postmenopausal women seen by gynecologists in this area will receive estrogen and a progestin for at least ten years. In a 1981 mailed survey of estrogen use related to menopausal symptoms in upstate New York, 87% of 159 gynecologists said they would prescribe estrogen for a 51-year-old woman with severe menopausal symptoms and an intact uterus. Less than 40% would have prescribed estrogen for three or more years, however. Prescribing rates in 1981 were similar to those reported by the same physicians in 1974, but the daily conjugated estrogen dose of 1.25 mg decreased by 72% and the proportion who would add a progestin increased from 15% to 46%.⁶

In the present survey, the most frequently prescribed regimen was conjugated estrogens in a dose of 0.625 mg per day.

This is the dose recommended for preventing osteoporosis,⁵ which was the second most frequently cited indication for estrogen use. Although details were not asked about the progestin duration or dosage, almost all respondents who offered this information were prescribing a progestin for ten days, the duration recommended to prevent estrogen-associated endometrial cancer.⁴ These data suggest that San Diego gynecologists are well informed about the current recommendations for prolonged estrogen use for the prevention of osteoporosis but are either less informed or less concerned about the paucity of data regarding long-term progestin use in older women.⁷

Numerous studies of risk and benefit of long-term unopposed estrogen use in postmenopausal women have been published. These studies show no consistent increased risk of any disease except endometrial cancer. Most studies suggest that unopposed estrogen use is associated with higher levels of high-density-lipoprotein (HDL) cholesterol and a reduced risk of myocardial infarction.⁸ (Cardiovascular disease is a much more common cause of morbidity and mortality in postmenopausal women than endometrial cancer.) In contrast, there are no studies of adequate design, duration and sample size to determine the risks and benefits of any prolonged estrogen-progestin combination in postmenopausal women. The only generally accepted benefit is the prevention of estrogen-associated endometrial cancer. Adding a progestin appears to block the estrogen-induced increment in HDL cholesterol; it is not known whether this effect obliterates any estrogen-cardiovascular benefit. Given the high prescribing rates reported for progestin, any possible untoward effects should be quickly researched and analyzed in relation to the benefits of such use.

REFERENCES

1. Kennedy DL, Baum CB, Forbes MB: Noncontraceptive estrogens and progestins: Use patterns over time. *Obstet Gynecol* 1985 Mar; 65:441-446
2. Stadel BV, Weiss N: Characteristics of menopausal women: A survey of King and Pierce counties in Washington, 1973-1974. *Am J Epidemiol* 1975 Sep; 102:209-216
3. Barrett-Connor E, Brown WV, Turner J, et al: Heart disease risk factors and hormone use in postmenopausal women. *JAMA* 1979 May; 241:2167-2169
4. Gambrell RD Jr: The menopause: Benefits and risks of estrogen-progestogen replacement therapy. *Fertil Steril* 1982 Apr; 37:457-474
5. National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases Consensus Development Panel (E. Barrett-Connor, member of Panel): Osteoporosis. *JAMA* 1984 Aug; 252:799-802
6. Pasley BH, Standfast SJ, Katz SH: Prescribing estrogen during menopause: Physician survey of practices in 1974 and 1981. *Public Health Rep* 1984 Jul-Aug; 99:424-429
7. Gastel B, Cornoni-Huntley J, Brody JA: Estrogen use and postmenopausal women: A basis for informed decisions. *J Fam Pract* 1980 Nov; 11:851-860
8. Bush TL, Barrett-Connor E: Noncontraceptive estrogen use and cardiovascular disease. *Epidemiol Rev* 1985; 7:80-104